

Unit 15.5

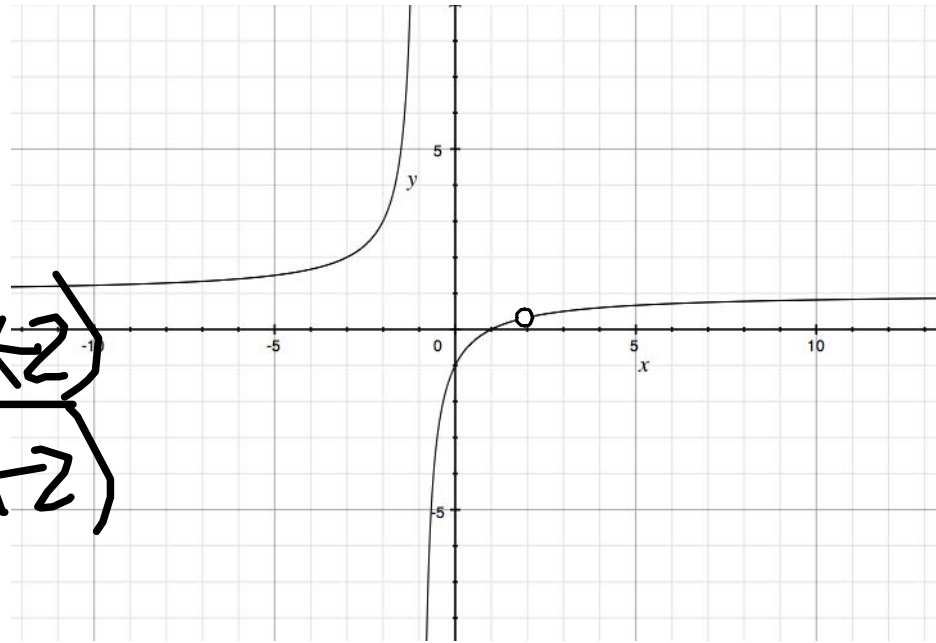
Day 3

Graphing Rational Functions

Part 3 - Equations from a graph

Find an equation for the following rational function. Hint: What do the x-int and y-int tell you? What do the vert/horiz asymptotes tell you? What does the hole tell you?

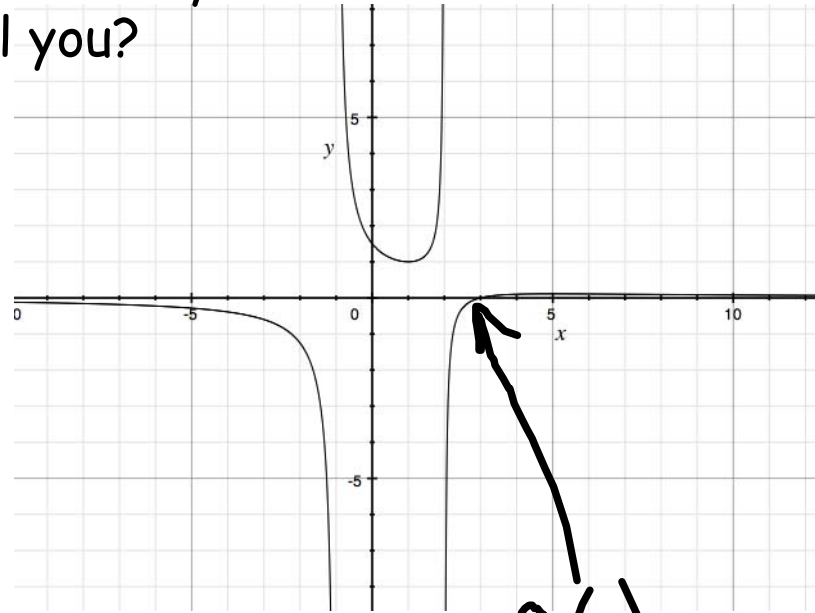
$$f(x) = \frac{(x-1)(x-2)}{(x+1)(x-2)}$$



Find an equation for the following rational function. Hint: What do the x-int and y-int tell you? What do the vert/horiz asymptotes tell you?

$$\begin{array}{l} \text{VA} \\ x = -1 \\ x = 2 \end{array} \quad \begin{array}{l} \text{HA} \\ y = 0 \end{array}$$

$$f(x) = \frac{(x-3)}{(x+1)(x-2)}$$



$$\begin{array}{l} \text{xint } (3, 0) \\ f(x) = 0 \\ f(3) = 0 \end{array}$$

Homework: Graphing Rational Functions Worksheet (all three sides),  
pg. 328: 41-46 (all)